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February 5, 1974

Dr. Paul Berg
Department of Biochemistry
Stanford University Medical Center
Stanford, California 94305

Dear Dr. Berg,

I am a postdoctoral fellow with Dr. Alvin Markovitz at the University of Chicago and would appreciate your opinion on a research proposal I am considering. Briefly, I would like to test whether the thymidine kinase gene from herpes simplex virus can be incorporated into a defective λ particle and be produced in multiple copies in E. coli. A segment of HSV DNA obtained by shearing or by E. coli restriction endonuclease RI would be covalently linked to λ DNA and used to infect sensitized E. coli (Δtdk). I would select for $tdk^+$ cells, purify them and induce λ. The phage DNA would then be purified and tested for the presence of the thymidine kinase gene. I realize that there are certain biohazards involved in such a proposal and we would try to minimize them in two ways. First, the actual work with HSV would be done in the laboratory of Dr. Bernard Roizman, where precautions have been established for working with HSV. In addition, certain genetic precautions would be taken, e.g., the bacteria could be made streptomycin dependent. Also phage could used carrying mutations such as $s^7$. Nevertheless, I still have reseavations about this type of research, and Jim Shapiro suggested that perhaps you could tell me the current thinking on this matter.

Sincerely,

Patricia B.

Patricia Berg

PB:pw